

**SOLICITOR**

To:	Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	<b>REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK</b>
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AUG 14 2006

U.S. PATENT &amp; TRADEMARK OFFICE

In Compliance with 35 U.S.C. § 290 and 37 C.F.R. § 1.416 you are hereby advised that a court action has been filed in the U.S. District Court WESTERN DISTRICT OF WASHINGTON on the following: X Patents or      Trademarks:

<b>DOCKET NO.</b>	<b>DATE FILED</b>	<b>US District Court WESTERN DISTRICT OF WASHINGTON</b>
2:06-cv-01126-JLR	8/9/06	
<b>PLAINTIFF</b>		<b>DEFENDANT</b>
The Topline Corporation		Dynasty Footwear LTD et al.
<b>PATENT OR TRADEMARK NO.</b>	<b>PATENT OR TRADEMARK NO.</b>	<b>PATENT OR TRADEMARK NO.</b>
1. See attached page for patent numbers	6.	11.
2. 7,056,558	7.	12.
3.	8.	13.
4.	9.	14.
5.	10.	15.

In the above-entitled case, the following patents(s)/ trademark(s) have been included:

<b>DATE INCLUDED</b>	<b>INCLUDED BY</b>	
	Amendment <u>    </u> Answer <u>    </u> Cross Bill <u>    </u> Other Pleading <u>    </u>	
<b>PATENT OR TRADEMARK NO.</b>	<b>PATENT OR TRADEMARK NO.</b>	<b>PATENT OR TRADEMARK NO.</b>
1.	6.	11.
2.	7.	12.
3.	8.	13.
4.	9.	14.
5.	10.	15.

In the above-entitled case, the following decision has been rendered or judgment issued:

<b>DECISION/JUDGMENT</b>
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<b>CLERK</b>	<b>(BY) DEPUTY CLERK</b>	<b>DATE</b>
Bruce Rifkin	DJ	8/14/06

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AUG 09 2006 08

U.S. DISTRICT COURT  
WESTERN DISTRICT OF WASHINGTON  
(SEATTLE)

06-CV-01126-CMP

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF WASHINGTON  
AT SEATTLE

THE TOPLINE CORPORATION, a Washington  
Corporation,

Plaintiff,

v.

DYNASTY FOOTWEAR, LTD., a California  
Corporation, SEYCHELLES IMPORTS LLC, a  
California Corporation sometimes doing business  
as HC FOOTWEAR, and JACK E. SILVERA, an  
individual,

Defendants.

Civil Action No.

**CV06-1126 JLR**

COMPLAINT FOR PATENT  
INFRINGEMENT

DEMAND FOR JURY TRIAL

Plaintiff The Topline Corporation, for its Complaint herein, alleges as follows:

NATURE OF ACTION

I. This is an action to halt ongoing and intentional patent infringement and is based on the Patent Laws of the United States, 35 U.S.C. § 100 *et seq.*

COMPLAINT FOR PATENT INFRINGEMENT

(C- )

Secu Intellectual Property Law Group PLLC  
101 Fifth Avenue, Suite 6300  
Seattle, Washington 98104-7002  
(206) 422-4600

**THE PARTIES**

2. Plaintiff The Topline Corporation ("Plaintiff" or "Topline") is a Washington Corporation, with a principal place of business at 13150 SE 32nd Street, Bellevue, Washington 98005.

3. Upon information and belief, Defendant Dynasty Footwear, LTD. ("Dynasty") is a California Corporation, with a principle place of business at 800 N. Sepulveda Boulevard, El Segundo, California 90245.

4. Upon information and belief, Defendant Seychelles Imports, LLC. ("Seychelles") is a California Corporation, with a principle place of business at 1550 East Franklin Avenue, El Segundo, California 90245.

5. Upon information and belief, Defendant Seychelles also does business as DC Footwear, and has a principal place of business at 815 N. Sepulveda Boulevard, El Segundo, California 90245.

6. Upon information and belief, Defendant Jack E. Silvera ("Silvera") is an individual residing in California and the principle owner and president of Dynasty and Seychelles. Upon information and belief, Silvera controls and/or has the ability to control the actions of defendants Dynasty and Seychelles complained of herein.

7. Upon information and belief, Dynasty, Seychelles and Silvera (collectively "Defendants"), import, sell and offer for sale and/or cause to induce others to import, sell and offer for sale in the United States footwear manufactured outside the United States using Topline's patented manufacturing methods.

**PLAINTIFF AND ITS RIGHTS**

8. Paul W. Daniels and Tsun-Jung Huang are the inventors of United States Patent No. 7,056,558 (hereinafter "the '558 Patent"), entitled "Fabric Shoe Outsole Manufacturing Methods by Electrostatic Flocking" and issued on June 6, 2006, a copy of which is attached

1 hereto as Exhibit A. Plaintiff Topline is the assignee and owner of the '558 Patent. The patent  
2 is currently in force and Topline has the authority to enforce the patent.

3 9. Plaintiff's Patent Application No. US 2004/0163283 which matured into the  
4 '558 Patent was published on August 26, 2004.

5 10. Plaintiff gave notice to Defendants of its published application and provisional  
6 patent rights under 35 U.S.C. §154(d) in a letter dated August 10, 2005, attached hereto as  
7 Exhibit B.

8 11. The claims of the '558 Patent are substantially the same as those published in  
9 Topline's corresponding patent application, giving rise to provisional rights under 35 U.S.C.  
10 § 154(d).

11 12. Pursuant to 35 U.S.C. § 282, the '558 Patent is presumed valid.

12 13. Topline is currently importing into and selling in this judicial district shoes that  
13 were manufactured outside the U.S. utilizing the invention of the '558 Patent.

14  
15 JURISDICTION AND VENUE

16 14. This action arises under the Patent Act, 35 U.S.C. § 271 *et seq.* The Court has  
17 original jurisdiction of such claims pursuant to 28 U.S.C. §§ 1331 and 1338(a).

18 15. Upon information and belief Defendants distribute and market their products  
19 nationwide.

20 16. Venue in this judicial district is proper under 28 U.S.C. §§ 1391 and/or 1400(b)  
21 because upon information and belief, Defendants sell and offer for sale products within this  
22 judicial district that have been imported into the United States and made by infringing  
23 Topline's patented methods. Upon information and belief, Defendants have sold or induced  
24 others to sell infringing products in this judicial district. Further, Topline has its principal place  
25 of business in this judicial district and has sold products covered by its patent rights in this  
26  
27

1 district, and a substantial part of the injury to Topline's property that is the subject of this action  
2 occurred in this district.

3  
4 CLAIM FOR PATENT INFRINGEMENT

5 17. Plaintiff Topline repeats and realleges each of the allegations contained in  
6 paragraphs 1 through 16 of this Complaint.

7 18. Upon information and belief, Defendants have been, and are infringing, literally  
8 or under the doctrine of equivalents, one or more claims of the '558 Patent by performing  
9 without authority, one or more of the following acts under 35 U.S.C. §§ 271: importing, using,  
10 offering to sell, selling, and/or causing to be imported, used, offered for sale or sold, footwear  
11 manufactured outside the United States utilizing Topline's patented shoe outsole manufacturing  
12 methods. Photographs of a representative infringing product imported and sold by Defendants  
13 are attached hereto as Exhibit C.

14 19. Upon information and belief, Defendants have and are knowingly and willfully  
15 inducing others to infringe the '558 Patent by inducing others to import, manufacture, use, offer  
16 for sale or sell footwear utilizing Topline's shoe outsole manufacturing methods by electrostatic  
17 flocking.

18 20. Upon information and belief, Defendants knew of Topline's rights and interests  
19 in the '558 Patent when they imported, sold, offered to sell and caused others to import, sell and  
20 offer to sell the Products, and had such notice of Plaintiff's published patent since at least  
21 August 10, 2005.

22 21. Upon information and belief, Defendants knew their acts would cause harm in  
23 the state of Washington.

24 22. Upon information and belief, Defendants' infringement has been willful.

25 23. Topline has been, and will continue to be, damaged by such infringement in an  
26 amount to be proven at trial, and in a manner and amount that cannot be fully measured or  
27

1 compensated in economic terms and for which there is no adequate remedy at law. The patent  
2 infringement actions of Defendants have damaged, and will continue to damage, Topline's  
3 business, market, reputation, and goodwill unless Defendants' acts of patent infringement  
4 complained of herein are enjoined. Plaintiff is entitled to an award of attorneys' fees in this  
5 case under 35 U.S.C. § 285 or as otherwise permitted by law.

6  
7 PRAYER FOR RELIEF

8 WHEREFORE, Topline respectfully demands judgment:

9 1. That Defendants, and their respective officers, agents, servants, employees,  
10 attorneys, and all other persons in active concert or participation with any of them, be enjoined  
11 and restrained during the pendency of this action and permanently thereafter from all acts that  
12 infringe the '558 Patent directly, contributorily, or by inducement, including manufacturing,  
13 importing, using, offering for sale and/or selling infringing footwear.

14 2. That Defendants be required to deliver up to the Court any and all footwear in  
15 their possession, custody or control that infringe the '558 Patent.

16 3. That Defendants be required to prepare and deliver to the Court a complete list  
17 of entities from whom Defendants purchased and to whom such Defendants have sold or  
18 otherwise delivered, footwear that infringes the '558 Patent, and to serve a copy of such list on  
19 Plaintiff's attorneys.

20 4. That Defendants be required to deliver to the Court any and all documents  
21 reflecting or relating to the manufacture, importation, purchase or sale of any footwear which  
22 infringes the '558 Patent.

23 5. That Defendants within thirty days after receiving notice of entry of judgment,  
24 be required to file with the Court and serve upon Plaintiff's counsel a written report under oath  
25 setting forth in detail the manner in which each Defendant has complied with Paragraphs 1  
26 through 4, immediately above.

27  
COMPLAINT FOR PATENT INFRINGEMENT

(Case No. \_\_\_\_\_) Filed August 14, 2006

SEED INTELLECTUAL PROPERTY LAW GROUP PLLC  
701 FIFTH AVENUE, SUITE 6300  
SEATTLE, WASHINGTON 98104-7092  
(206) 622-4900

1           6. That Defendants account for and pay over to Topline damages sustained by  
2 Plaintiff, directly and indirectly, by reason of Defendants' patent infringement, including  
3 infringement of Plaintiff's provisional rights under 35 U.S.C. § 154(d)

4           7. That Defendants' infringement of the '558 Patent be found willful and that treble  
5 damages, together with interest and costs, be awarded under 35 U.S.C. § 284, or as otherwise  
6 permitted by law.

7           8. That the present case be found exceptional and that attorneys' fees be awarded to  
8 Plaintiff under 35 U.S.C. § 285, or as otherwise permitted by law.

9           9. That Topline have such other and further relief as the Court may deem  
10 appropriate and equitable.

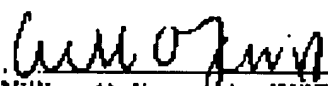
11  
12 **DEMAND FOR JURY TRIAL**

13  
14 Plaintiff hereby demands a trial by jury of all issue in this case.

15  
16 DATED this 9<sup>th</sup> day of August, 2006.

17                               Respectfully submitted,

18  
19 SEED IP Law Group PLLC

20   
21 William O. Ferrone Jr., WSBA #11831  
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25                               Attorneys for Plaintiff  
26 THE TOPLINE CORPORATION  
27

# EXHIBIT A





(12) **United States Patent**  
**Daniels et al.**

(10) **Patent No.:** **US 7,056,558 B2**  
(45) **Date of Patent:** **Jun. 6, 2006**

(54) **FABRIC SHOE OUTSOLE MANUFACTURING METHODS BY ELECTROSTATIC FLOCKING**

(75) **Inventors:** **Paul W. Daniels, Belknap, WA (US); Tsun-Jung Huang, Belknap, WA (US)**

(73) **Assignee:** **The Topline Corporation, Belknap, WA (US)**

(\*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 117 days.

(21) **Appl. No.:** **10/660,363**

(22) **Filed:** **Sep. 14, 2003**

(65) **Priority Publication Data**  
**US 2004/0163283 A1** **AUG. 26, 2004**

**Related U.S. Application Data**

(63) **Continuation-in-part of application No. 10/374,679, filed on Feb. 24, 2003, now abandoned**

(51) **Int. Cl.**  
**H05D 1/04** (2006.01)  
**H05D 1/04** (2006.01)

(52) **U.S. Cl.** **427/466; 427/462; 427/464**  
(58) **Field of Classification Search** **427/462, 427/464, 465.**  
**See application file for complete search history.**

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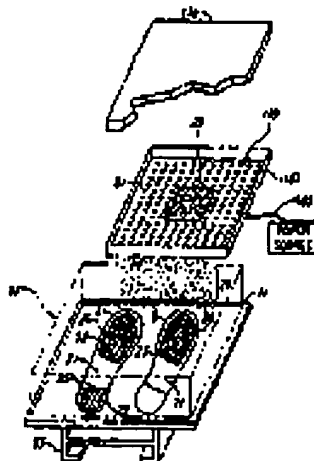
**Primary Examiner:** Fred J. Parker

(74) **Attorney, Agent, or Firm:** Seed IP Law Group PLLC

(57) **ABSTRACT**

A shoe having a fabric outsole and method for manufacturing are disclosed. In described embodiments, a shoe outsole with a bottom surface wherein an adhesive is applied to at least a portion of the bottom surface of the shoe outsole and a plurality of fibers are embedded within the adhesive. In the described method embodiment, once the adhesive is applied to the outsole, fibers are sifted down through an electrostatic field onto the adhesive. Once sufficient fibers have been embedded, the adhesive is cured and then coated.

**10 Claims, 5 Drawing Sheets**



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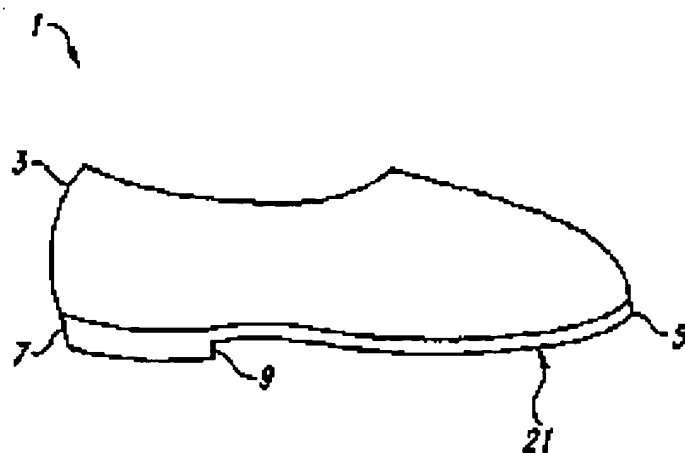


FIG. 1

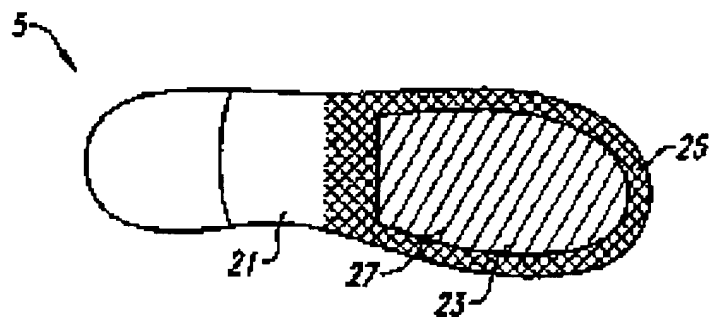


FIG. 2

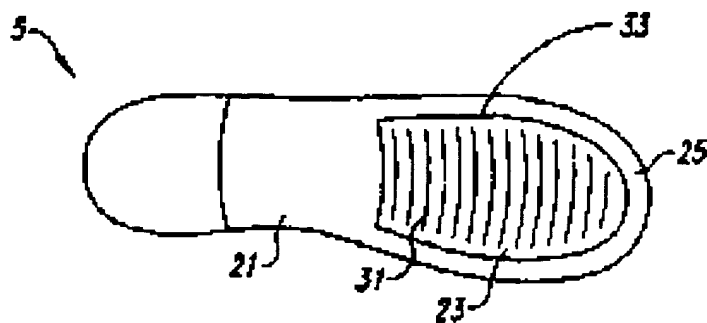


FIG. 3



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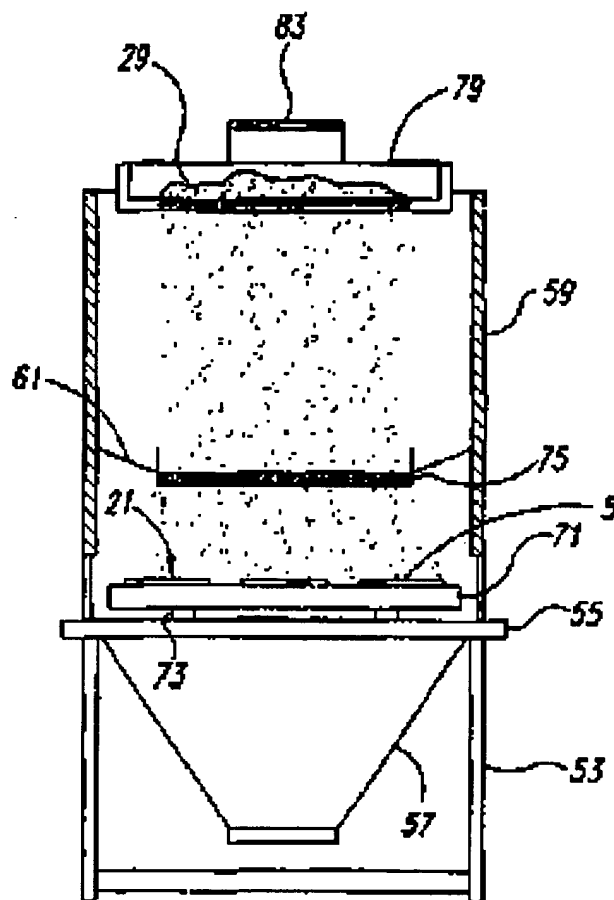


FIG. 5

U.S. Patent

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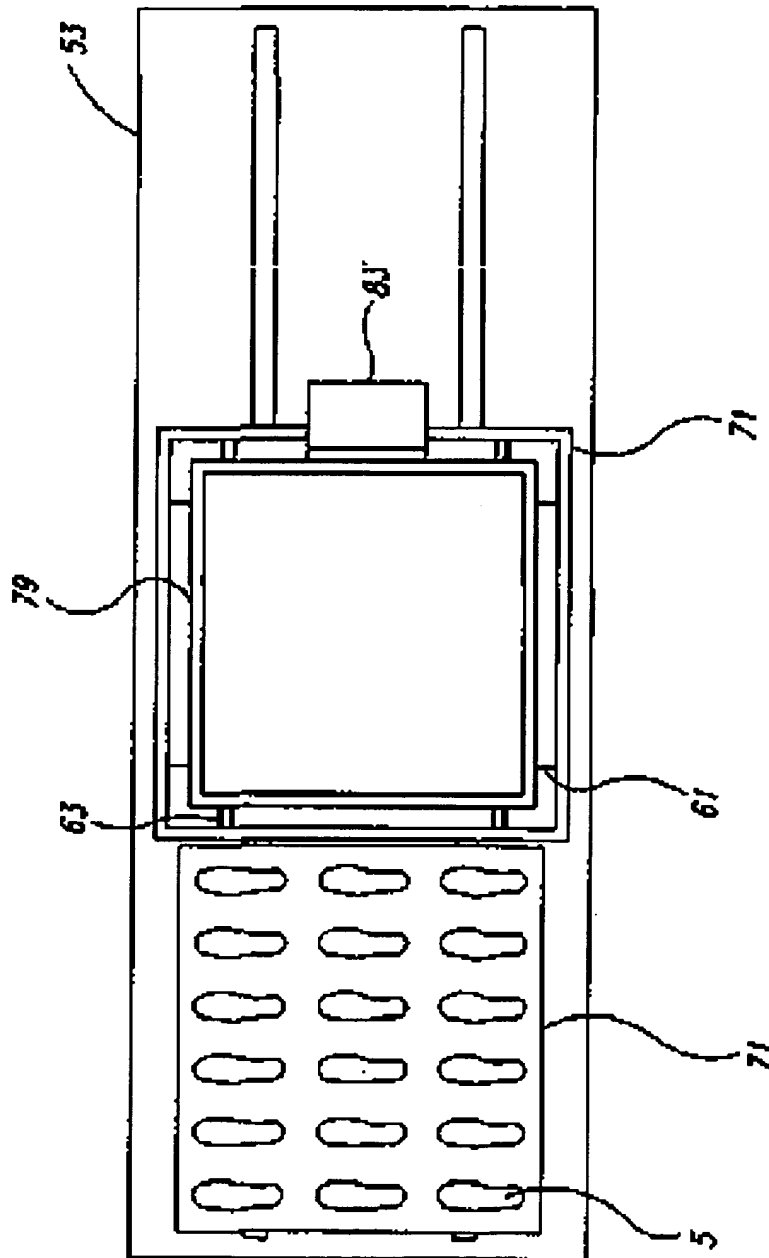


FIG. 6



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# FABRIC SHOE OUTSOLE MANUFACTURING METHODS BY ELECTROSTATIC FLOCKING

## CROSS-REFERENCE TO RELATED APPLICATION

This application is a continuation-in-part of U.S. patent application Ser. No. 10/374,674, filed Feb. 24, 2003, now abandoned, which is incorporated herein by reference in its entirety.

## BACKGROUND OF THE INVENTION

### 1. Field of the Invention

The present invention relates to a shoe outsole where at least a portion of the outsole has fibers embedded therein, and to methods of manufacturing same.

### 2. Description of the Related Art

Flocking examples are known in slippers, for example, which are typically constructed with a fabric backed foam outsole or a midsole insert inserted between the shoe upper and lower lining sections. Fabric outsoles are also disclosed in U.S. Pat. No. 4,430,944 in which a fabric layer fabric is inserted in a cushion mold in situ with a backing layer consisting of a rubber or plastic material. Although these cases suggest that desirable results may be achieved with the prior art methods, the methods are of limited use and often require specially designed molds and a time consuming, manual, curing process.

## BRIEF SUMMARY OF THE INVENTION

The present invention relates to a shoe outsole where at least a portion of the bottom surface of the shoe outsole has fibers embedded into adhesive, and toward a method of applying the fibers to the shoe outsole. In the embodiments described herein, the resulting product of the present invention is a shoe where at least a portion of the bottom surface of the shoe outsole has a fiber surface. The method of applying the fibers according to the embodiments described herein consists of attaching or at least a portion of a bottom surface of the shoe outsole; applying adhesive to the remaining portion of the bottom surface; and placing the shoe outsole on a support plate with the adhesive side facing upward. The support plate is placed underneath a conductive screen. An electric field is created between the conductive screen and the support plate by applying power to the conductive screen. Located above the conductive screen is a fiber device with fibers such as textile fibers, for example, placed thereon. As the fiber device is energized, the fibers gravitate toward the conductive screen and upon passing through the screen the textile fibers become charged. The fibers further advance through the electric field and become embedded in the adhesive previously applied to the outsole. After a sufficient number of fibers have become embedded in the outsole, the outsole is then heated to cure the adhesive.

The process of applying the fibers to the bottom of a shoe is unexpensive and does not require any special molds or special procedures for affixing the outsole to the shoe during shoe production. Textile fibers or other extrusions that can be separated into thread-like structures can be used, as desired. Additionally, the present invention is not limited to a certain type of shoe outsole and thereby may be accomplished on a wide variety of shoe types such as dress shoes, women's high-heeled shoes, sneakers, etc. The present inven-

tion provides shoe designers and retailers a larger variety of options for point-of-sale displays and presents an aesthetically pleasing shoe with the appearance and impression of wool.

## BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

FIG. 1 is an underside view of a type of shoe with an outsole according to one embodiment of the present invention.

FIG. 2 is a plan view of the bottom surface of the shoe outsole of FIG. 1.

FIG. 3 is plan view of the bottom surface of the shoe outsole of FIG. 1 according to a second embodiment of the present invention.

FIG. 4 is a side view of a system for applying textile fibers to a shoe outsole with a wall of the transfer station partially removed.

FIG. 5 is an end view schematically illustrating the method for applying fibers to the bottom surface of a shoe outsole with a wall of the transfer station removed for clarity.

FIG. 6 is a plan view of the system for applying fibers to a shoe outsole.

FIG. 7 is an exploded view of an alternate embodiment of the system for applying fibers to a shoe outsole.

## DETAILED DESCRIPTION OF THE INVENTION

The present invention is generally directed toward a shoe outsole where at least a portion of the bottom surface of the shoe outsole contains fibers embedded into adhesive, and toward a method of applying the textile fibers to the shoe outsole. The embodiments described herein provide a high degree of flexibility in applying fibers either to the entire bottom surface of the shoe outsole, for example, or to only a selected portion of the bottom surface. Textile fibers may be used or other substances that can be separated into thread-like structures can be used as desired. Further, the bottom surface of the shoe outsole may vary in texture from smooth to slightly ribbed for better traction, or to a more aggressive tread. The present invention provides retailers enhanced point-of-sale display options with a shoe that has both a visually appealing upper portion as well as a visually appealing bottom surface. Many aspects, details of the present invention are set forth in the embodiments described and illustrated herein to provide an understanding of the invention. One skilled in the art, however, will understand that the present invention may have additional and alternative embodiments, or may be practiced without several of the details described in the following description.

FIG. 1 illustrates a typical shoe 1 incorporating a shoe upper 3 and a shoe outsole 5. The shoe outsole 5 having a top surface (not shown) and a bottom surface 21. The typical shoe 1 may be configured to have a heel 7 wherein the horizontal portion of the heel may be considered as part of the bottom surface 21 of the shoe outsole 5. The present invention may also be practiced other portions of the outsole in the shoe manner as will be described for the bottom surface 21 of the shoe outsole 5.

FIG. 2 illustrates the bottom surface 21 of the shoe outsole 5. The shoe outsole 5 may be made from a variety of different materials such as fiber reinforced composite material, polyvinyl chloride (PVC), thermoplastic rubber (TPR), rubber, or ethylene vinyl acetate (EVA), for example. The



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bottom surface 21 of the shoe outsole 5 may have a first region 23 and a second region 25. The first region 23 may be unmasked or recessed to expose the fibers 29 (FIG. 5) while the second region 25 may be masked off to prevent any fibers 29 (FIG. 5) from reaching the sole. The second region 25 would typically be masked off before any adhesive 27 or fibers 29 (FIG. 4) are applied to the shoe outsole 5. However, it is not necessary that any portion of the bottom surface 21 be masked off such that the adhesive 27 and subsequently the fibers 29 (FIG. 4) may be applied to the entire bottom surface 21.

The fibers 29 (FIG. 5) can have a length in the range of 0.2 to 1.0 millimeter. The shorter fibers, e.g., 0.2 mm length may give the material outside 5 a grainy, almost sandpaper type feel and feel. It may be preferable to apply the shorter fibers in athletic type shoes. Conversely, the longer fibers may be selected for dressier shoes like pumps. The length of the fibers may affect the amount of slippage between the bottom surface 21 of the outsole 5 and a walking surface. The advantages associated with fibers having a length greater than 1.0 mm may be mask but are not preferred for aesthetic purposes. In addition, the fibers 29 (FIG. 5) can be made out of synthetic textile material such as rayon and nylon or a natural textile material such as cotton.

FIG. 3 illustrates a variation of the present invention. At least a portion of the bottom surface 21 may have a grid region 31 such as ribs, ridges, or some other surface effect which gives the shoe 1 a more aggressive feel. For purposes of the present invention, the bottom surface 21 is defined to include all of the surfaces making up any portion of the heel region 33 such as the vertical surfaces of any ribs or ridges.

FIGS. 4-6 illustrate the overall system 51 for attaching fibers 29 (FIG. 5) to the bottom surface 21 of the shoe outsole 5. The system 51 is primarily comprised of a support structure 53, a support plate 71, a transfer station 59, a conductive screen 75, and a sifting device 79.

The support structure 53 may be a bench with a flat top surface 55. The top surface 55 may have a conveyor belt or track to transfer the conductive plate 71 containing the shoe outsole 5 into and out of the transfer station 59. Attached to the support structure 53 and below the transfer station 59 may be a recycle flume 57 for recycling fibers 29 that did not become embedded into the adhesive 27 during a fiber application process.

The support plate 71 acts as the support member 71 for supporting the shoe outsole 5. The movement of the support plate 71 into and out of the transfer station 59 may be accomplished in a number of standard ways, such as by conveyor belt or by rollers 35 (FIG. 3) mounted at the bottom of the support plate. The support plate 71 may support a plurality of shoe outsoles 5 and is preferably grounded.

The transfer station 59 forms a compartment that houses the conductive screen 75 and the sifting device 79. The bottom portion of the transfer station 59 may have an opening to allow the support plate 71 to be moved in and out.

The conductive screen 75 provides the charging means for electrically charging the fibers 29 that pass through. The conductive screen 75 may be attached to the transfer station 59 with corner brackets 61. The conductive screen 75 contains a plurality of perforations or holes 77 through which the fibers 29 pass during the fiber application operation. Additionally, a power supply may be connected to the conductive screen 75. When the power supply is turned on

4

to the conductive screen 75, an electric field region 87 is generated between the conductive screen 75 and the conductive plate 71.

The sifting device 79 provides the sifting means for distributing at least some of the fibers 29 in the shoe outsole 5. The sifting device 79 may be attached to the transfer station 59 with insulator brackets 63. The insulator brackets 63 isolate the sifting device 79 from the electrical circuit created when power is supplied to the conductive screen 75 which may be attached to the transfer station 59 with metal brackets. The sifting device 79 may be a box configuration with an open top for adding fibers 29. Complied with the sifting device 79 may be a sifting motor 83 to actuate the sifting device 79. The bottom surface 89 of the sifting device 79 may be a fine mesh screen with a plurality of perforations 81. The type of screen used for a given application will depend on the type of fibers 29 being sifted. The only requirement for the perforations 81 in the sifting device 79 is that the perforations 81 be adequately sized to permit a desirable flow rate of the fibers 29 from the sifting device 79 while avoiding continuously clogged perforations 81, but not permitting the fibers 29 to depart the sifting device 79 too quickly. The fibers 29 typically utilized in the embodiment described herein may be made from either rayon or rayon blends, for example.

FIG. 5 schematically illustrates the fiber application operation. One skilled in the art will understand that the method of the present invention may have additional steps or that the steps of the process may not have to occur in the order as discussed herein. The method of applying fibers 29 to the bottom surface 21 of the shoe outsole 5 may begin by separating the bottom surface 21 into two distinct regions: 23 and 25. The first region 23 will eventually be coated with fibers 29. However, a second region 25 may first be masked off with tape or other suitable material to form a border 33 (FIG. 3) where any applied adhesive 27 would not overlap. There is no requirement that any portion of the bottom surface 21 actually be masked off. It is conceivable that the entire bottom surface 21 could be coated with fibers 29; therefore the first region 23 would be equivalent to the entire bottom surface.

Once the second region 25 has been masked off, adhesive 27 may be applied to the first region 23. The adhesive 27 may be brushed onto the first region 23. A type of adhesive 27 that may be used would be of a type that is curable when subjected to higher than room temperature for a sufficient amount of time, typically 1-2 minutes.

The shoe outsole 5, after being masked off and having the adhesive 27 applied, may be set upon a support plate 71 with the bottom surface 21 of the shoe outsole 5 facing upward. However, it should be noted that the shoe outsole 5 may be set upon the support plate 71 before the masking and adhesive application steps. The support plate 71 containing the prepared shoe outsole 5 may then be moved into the transfer station 59 such that the support plate 71 is exposed in part directly under the conductive screen 75. The movement of the support plate 71 into the transfer station 59 may be accomplished either manually or automated with a track and roller or a conveyor belt system.

The conductive screen 75 supported within the transfer station 59 may be powered up; thus creating an electrical circuit with the conductive screen 75, the transfer station 59, and the support plate 71. An electric field region 87 is created between the conductive screen 75 and the support plate 71, thereby ionizing the prepared shoe outsole 5. The power supplied to the conductive screen 75 may be from a generator putting out 110 to 1000 Watts, for example.

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With the electric field region 87 established, the fibers 29 continued in the sifting device 29 may be sifted through the perforations 81 contained therein. The sifting of the fibers 29 may be accomplished manually (i.e., shaken by hand) or automatically through a sifting device 83 coupled to the sifting device 29. In either event, as the fibers 29 pass through the perforations 81 of the sifting device 29, the fibers 29 are gravitationally directed toward the conductive screen 75 located directly below.

The conductive screen 75 being perforated or slotted 77, permits the fibers 29 to pass through virtually unobstructed. Upon passing through the conductive screen 75, the fibers 29 become electrically charged. The charged fibers 29, upon entering the electric field region 87, become substantially aligned with the electric field such that the charged fibers 29 are approximately vertically oriented. The charged fibers 29 maintain their vertical orientation upon contacting the adhesive 27 on the bottom surface 21 of the shoe outsole 5. The orientation of the shoe outsole 5 as supported on the support plate 71 determines the resulting angle of the fibers 29 with respect to the bottom surface 21. This angle may be varied depending on the look desired. The charge in the fibers 29 is dissipated upon contact with the adhesive 27 or the support plate 71. Any loose fibers 29 may be shaken off the outsole 5 into the recycle funnel 57. Additionally, any fibers 29 that did not become embedded into the adhesive 27 are also directed into the recycle funnel 57. The process recycles fibers taken approximately 5-10 seconds from the moment sifting begins until the bottom surface 21 of the shoe outsole 5 are sufficiently coated with fibers 29.

The support plate 71 supporting the shoe outsole 5 may then be transported to a heating device (not shown), such as a spinning oven typically found in a shoe factory, to cure the adhesive 27 containing the embedded fibers 29. However, it is not required that the shoe outsole 5 remain on the support plate 71. The shoe outsole 5 may be transferred to a separate tray before being placed in the oven. An adequate adhesive 27 curing temperature for the oven is approximately 120 degrees Celsius. The shoe outsole should be at the curing temperature for approximately 1-2 minutes to achieve sufficient curing or hardening of the adhesive 27.

Finally, the shoe outsole 5 may be coated and then treated with an anti-slip solution applied to the first region 23 (i.e., the heel contact region). The anti-slip solution may be applied by spraying the bottom surface 21. Once the anti-slip solution has sufficiently dried, the shoe outsole 5 may be added to a shoe upper 3 in the standard production line of a shoe 1 processing line.

The present invention provides an inexpensive method of creating a visually appealing shoe 1. Such a process could be employed to process many outsole 5 simultaneously as shown in FIG. 6. There are no special molds or mold designs required to produce the outsole 5 and no special procedures for shoe production after the fiber application process has been completed.

FIG. 7 illustrates an alternate embodiment of the invention for attaching fibers 29 to the bottom surface 21 of a shoe outsole 5. The alternate embodiment is primarily comprised of a support structure 83, a support plate 71, a cover plate 125, and a conductive screen 179. Additionally, the alternate embodiment does not require the use of a transfer funnel 59 as the movement of the shoe outsole 5 into and out of the electric field 87 may be accomplished manually. Only the details of the alternate embodiment that have a substantially different structural form are described herein.

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As shown in FIG. 7, the alternate embodiment uses a screen 179 containing a plurality of perforations 81 through which the fibers 29 pass during the fiber application operation.

A screen 179 may be changed to create the electric field 87 between the screen 179 and the support plate 71. The power source 185 to the screen 179 may be from a generator providing 500 to 1000 Watts, for example.

Although several structural details in the alternate embodiment have been varied, the overall fiber application operation is substantially the same as the previous embodiment with the only difference being that the fibers 29 may be pre-sifted onto the screen 179 to provide a more uniform fiber application. Accordingly, with the electric field region 87 established, the fibers 29 continued on the screen 179 become charged due to their contact with the screen 179. The charged fibers 29 are subsequently drawn through the perforations 81 contained within the screen 179 as the screen is moved toward the attached cover plate 125. The cover plate may be made from any non-conductive material. As the charged fibers 29 pass through the perforations 81 of the screen 179, the charged fibers 29 are gravitationally directed toward the grounded support plate 71 located directly below and also become vertically aligned with the electric field 87.

A significant advantage of the resulting product, a shoe 1 with at least a portion 23 of the outsole 5 being coated with fibers 29, is that the retailers are provided with a new, innovative and desirable feature that can be used to attract customer attention to the product. Because the fibers 29 may be matched or artistically contrived with the color of the shoe 1, or even provide the shoe outsole 5 with a simulated leather look, the shoe retailers now have a wider range of options on how and where to display the shoes. Additionally, the appearance of the outsole 5 with at least a portion 23 coated with fibers 29 provides the impression of value in a competitive shoe market.

The bottom surface 21 of the outsole 5 coated with fibers 29 does not limit or degrade the functional performance of the shoe 1. An outsole 5 with a fabric coated sole of the present invention provides an equivalent amount of protection from the elements as a non-coated sole.

From the foregoing, it will be appreciated that, although specific embodiments of the invention have been described herein for purposes of illustration, various modifications may be made without departing from the spirit and scope of the invention. Accordingly, the invention is not limited except in so far as by the appended claims.

The invention claimed is:

1. A method for applying fibers to a shoe outsole, the method comprising:

applying an adhesive to a first region of a bottom surface of the shoe outsole;

placing the shoe outsole on top of a support plate, the bottom surface facing upward;

providing a screen above the support plate;

creating an electrostatic field in a region above the support plate;

drawing a plurality of fibers through the screen wherein the fibers are charged and gravitationally drawn toward the support plate due to the electrostatic field region, the fibers continuing downward through the electrostatic field region until at least some of the fibers become embedded into the adhesive;

removing the support plate with the shoe outsole; and  
curing the adhesive with the embedded fibers therein.

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2. The method of claim 1 wherein a second region of the bottom surface of the shoe outsole is uncoated off before applying the adhesive.

3. The method of claim 1 further comprising a sifting device located above the screen wherein the electric field region is created between the screen and the support plate and the fibers are sifted downward toward the screen.

4. The method of claim 3 wherein power is supplied to the screen before the support plate is placed under the copulative screen.

5. The method of claim 3 wherein the fibers are electrostatically charged as they pass through the screen and thereafter become substantially aligned with the electrostatic field.

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6. The method of claim 3, further comprising a sifting member coupled to the sifting device for activation thereof.

7. The method of claim 1 wherein the fibers upon impact with the adhesive, are substantially aligned in the first region of the bottom surface of the shoe outsole.

8. The method of claim 1 wherein the curing of the adhesive is accomplished by placing the support plate with the shoe outsole into an oven.

9. The method of claim 1, further comprising the support plate having a plurality of rollers for moving the support plate under the screen.

10. The method of claim 1 wherein the fibers are comprised of textile material.

\* \* \* \* \*

# EXHIBIT B

Seed<sup>IP</sup>

August 10, 2005

William O. Ferron, Jr.  
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BillF@SeedIP.com

Mr. Jack E. Silveira, President  
Dynasty Footwear, Ltd.  
800 N. Sepulveda Blvd.  
El Segundo, CA 90245-2702

Without Prejudice

Re: Fabric Shoe Outsole Patent Issues  
Seed IP Reference: 910009.001

Dear Mr. Silveira:

We represent The Topline Corporation in patent and other intellectual property matters. Topline has developed a proprietary manufacturing method and fabric sole that is the subject of the enclosed patent filing, US 2004/0163283 A1, titled "Shoe Outsole Manufacturing Methods" assigned to Topline at reel/frame 014320/0136 of the records of the U.S. Patent Office. Note claims 1-9 are directed to shoe outsoles, claims 10-19 are directed to shoes and claims 19-27 are directed to methods of manufacturing shoes. This technology offers a fabric sole that can be cost-effectively manufactured and has excellent aesthetic appeal.

It has come to our attention that you may be manufacturing, importing and/or selling shoes covered by Topline's patent filing. This letter serves as your official notice of Topline's patent filing and provisional rights under 35 U.S.C. § 154(d) and that all manufacture, importation and sales of such goods by you will be subject to infringement damages under Topline's patent.

Topline is willing to discuss an ongoing license arrangement on reasonable terms for its proprietary methods and fabric sole design if you are willing to take a license at this time. Otherwise, Topline intends to take legal action against all infringers seeking retroactive damages at the earliest possible date.

Please contact us after you have had a chance to review this letter and let us know if you are interested in discussing a license for Topline's technology. We would appreciate hearing from you by August 24, 2005. Thank you

Very truly yours,  
Seed IP Law Group PLLC

  
William O. Ferron, Jr.

Enclosure:  
US 2004/0163283 A1

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# EXHIBIT C







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